

## Ratio problems



- 1 A floor-tiler uses 4 grey tiles to every 3 yellow ones.
  - (a) If he wants to use 80 grey tiles, how many yellow tiles does he need?
  - (b) If he uses 150 yellow tiles, how many grey tiles will there be?
  - (c) If he uses 70 tiles *altogether*, how many grey and how many yellow will he need?
  - (d) If he uses 420 tiles *altogether*, how many grey ones will he need?
- 2 When Julian went shopping, he found that 2 cricket balls cost the same amount as 3 tennis balls.
  - (a) He bought 9 tennis balls for \$12. How many cricket balls could he have bought for this amount?
  - (b) How much would 15 tennis balls cost?
  - (c) How many tennis balls would he get for \$32?
  - (d) How many cricket balls would he get for \$32?
- 3 A concrete mixture was made up of 4 parts of metal to 3 parts of sand to 1 part of cement. Find the quantity of each material needed to make:
  - (a) 8 cu.m of concrete;
  - (b) 40 cu.m of concrete.
- 4 In a school of 360 pupils, there are 5 boys to every 4 girls. How many girls are there?
- 5 Out of every 5 seeds planted, 3 will grow into beautiful plants.
  - (a) If 30 seeds are planted, how many plants should grow?
  - (b) If 24 beautiful plants are growing, how many seeds were planted?